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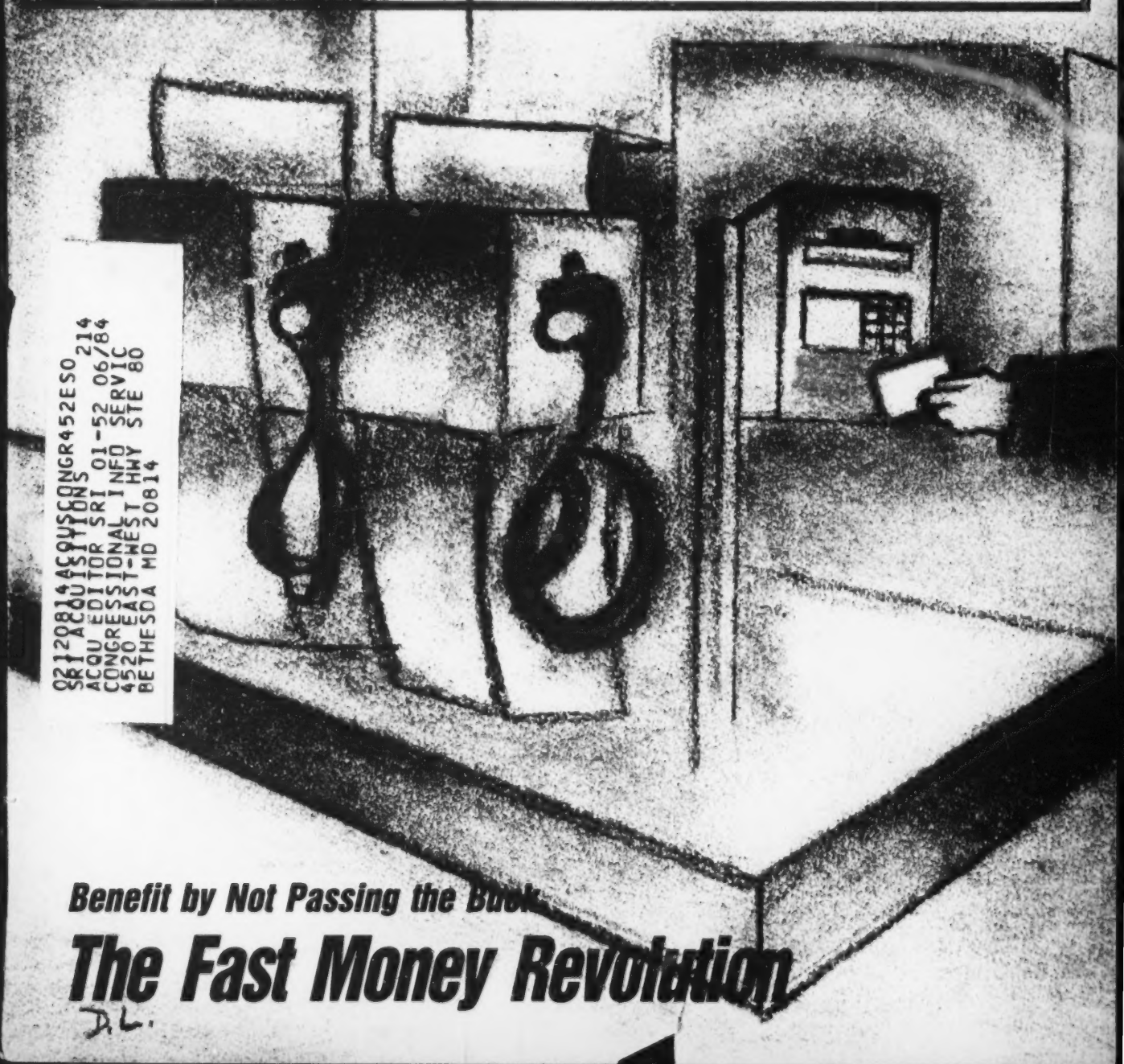

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Benefit by Not Passing the Buck

The Fast Money Revolution

D.L.

NATIONAL PETROLEUM NEWS

JANUARY 1984 VOL. 76 NO. 1

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Petroleum marketing has entered an automation revolution which has been brewing for some time. And, with cost-cutting advantages, card acceptors are attracting the major players, as well as the renegade independents. Page 38

Cover art by Deborah Lawrence, Chicago

When Bill Penney and John Reed (above) closed their successful 50,000-gal./month, full-serve station to build a self-serve/C-store unit, people said they were crazy. But they don't say that now. Page 48

A promotional resurgence and recent equipment developments could spell brighter days ahead for home heating oil marketers. Page 54

(More Late News *on page 12)*

Texaco Contract Challenged

Texaco's increasing use of contract operators at its high-volume, multi-retail outlets has hit its first legal snag in what some think might not be the last such court case.

A federal court judge in Miami was weighing the arguments of a chain retailer's suit which could set some boundaries for the Petroleum Marketing Practices Act, with a decision handed down by January at the earliest.

Farm Stores, which was terminated abruptly by its supplier, Texaco, in August, filed a complaint contending it had signed a three-year contract with Texaco in September 1982 to operate a Miami station with a C-store attached. Farm Stores said it was to handle the store rent-free in exchange for its management expertise.

The firm also said it had increased the station's volume from 30,000 gal./month to 30,000 gal./week, and although Farm Stores was operating on a contract, it nevertheless was a franchisee as well and entitled to the full protection of the federal marketing law.

Jobbers also are watching this one closely for its bearing on legalities of certain Texaco contracts.

Federal Marketplace Probe Could Spur PMPA Changes

In a move that could open doors for marketers seeking to change provisions of the Petroleum Marketing Practices Act, a sweeping congressional probe of the petroleum marketplace has been launched by the General Accounting Office at the request of House Energy and Commerce Committee Chairman John Dingell (D-Mich.).

The probe was launched in November but wasn't made public until just before lawmakers adjourned for the year.

GAO's investigators and auditors were asked to conduct a thorough fact-finding of the entire industry, from the oil field to the pump. They also were instructed to pay close attention to the current status of independent marketers.

Rep. Dingell told GAO the goal of the probe should be to find out whether "independent marketers are undergoing losses in their population and volume of sales in excess of the overall decline in demand for automotive fuels . . . and the causes of any increment of loss not attributable to natural market forces."

The timing couldn't be better for the National Oil Jobbers Council (NOJC) and Service Station Dealers of America (SSDA), which are asking Congress for changes in the Petroleum Marketing Practices Act (PMPA). In fact, Rep. Dingell specifically asks GAO to send observers to upcoming hearings on PMPA.

Just as important, the investigation will produce periodic headlines—GAO reports are routinely leaked to reporters piecemeal as they progress. That will keep pressure on Congress all year to act on PMPA amendments and perhaps will expedite other bills (including changes in the windfall profits tax on Alaskan North Slope oil).

Predictably, NOJC and SSDA say they're "pleased" with Dingell's request. Both say they're confident the GAO finding will help their legislative cause and bring other benefits, especially regarding antitrust enforcement.

Sun Targets Denser Areas

Sun Co. is putting itself through a corporate wringer which ultimately will result in a sharp reduction in personnel and a redesigning of its domestic and international refining and marketing strategies.

Sun dropped one shoe in early December when it announced that it is closing three facilities at its Marcus Hook, Pa., refinery that make solvent lubes, wax and specialty oils. It also is shedding its lubricant marketing operations in Europe. It will continue to manufacture lubricants at its refineries in Tulsa, Okla., and Puerto Rico.

The shutdowns will result in the elimination of about 500 of the 1,400 jobs at Marcus Hook, and possibly another 100 if the packaging plant is closed. The action also would end an additional 300 jobs in international and domestic marketing and administration, as well as shut off a $65-million write-off for tax losses in the fourth quarter.

Sun indicated previously that it is evaluating task force reports on downstream marketing operations, stripper well properties, accounting procedures and corporate staffing. Announcements are expected to be made on these phases early this year. But the key words on what is ahead for marketing are these of president Robert McClements Jr. to a security analyst group in New York City: "We plan on finding ways to streamline our refining and marketing operations so that we can compete where we can gain or maintain a competitive advantage. We will be focusing on higher-volume service stations in concentrated areas."

• MARKETPLACE AT A GLANCE

AVERAGE GASOLINE PRICES IN THE U.S. (¢ per gal.)

OCTOBER	Gasoline (All types)	Leaded Regular	Unleaded Regular	Leaded Premium
U.S. City Avg.	$1.239	$1.172	$1.255	$1.372
Regions:				
Northeast	1.261	1.194	1.264	NA
North Central	1.265	1.212	1.289	NA
South	1.222	1.153	1.233	NA
West	1.212	1.129	1.234	1.369

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

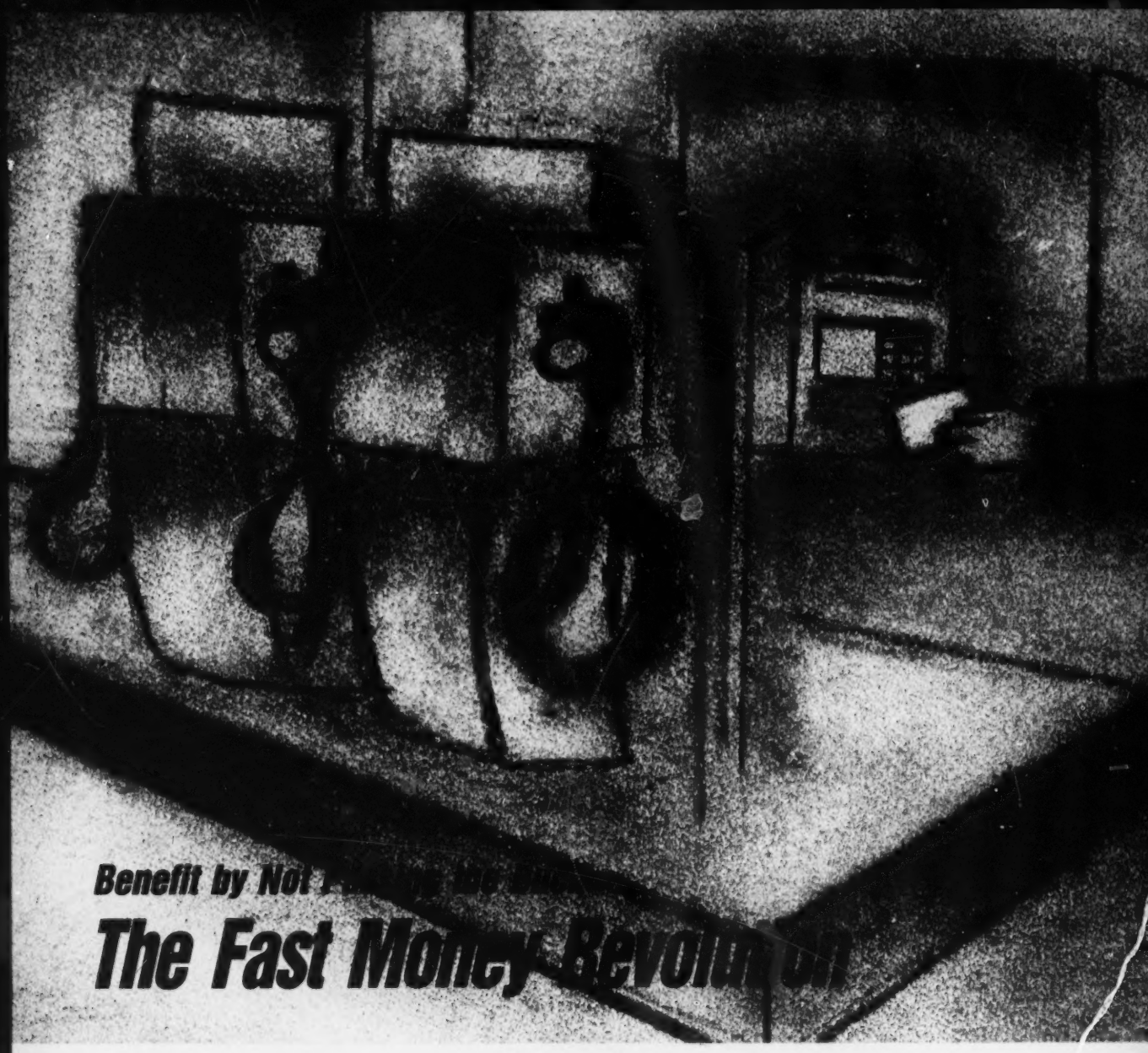
STOCKS (Add 000 bbl.)

	11/25/83	11/26/82
Gasoline (total)	231,483	230,113
Gasoline (unleaded)*	99,322	93,825
Jet Kerosine **	36,106	33,196
Distillates	162,549	183,011
Residual	49,182	62,286

**Included in gasoline total.*

***Jet kero only; totals no longer kept by API and DOE.*

Source: American Petroleum Institute.



Benefit by Not [illegible]

The Fast Money Revolution

Petroleum marketing has entered a period of revolution in automation which has been brewing at various levels for roughly the past one-and-a-half years.

Oil companies, banks, jobbers, dealers, switching networks and equipment manufacturers have been plotting strategies to eliminate eventually some, if not all, of the costs associated with cash, check and credit card payment. A host of major and independent marketers across the country have been testing equipment and software, all in the name of efficiency, cost control and less float time.

Card-activated fueling systems triggered by debit/credit cards, electronic funds transfer (EFT), point-of-sale (POS), automated teller machines (ATMs) and cash acceptors may or may not replace current payment methods. But the advantages of the new technology appear to be many, and the disadvantages few. If the various systems prove reliable, cost efficient and, most importantly, acceptable to consumers, all parties involved stand to gain. The marketer benefits from:

—Elimination of chargebacks on bad checks

—Increased card base with systems accepting many cards, and the related increase in traffic

—Efficient product inventory monitoring and financial management and

—Lower risk of robbery on-site and during bank drops.

What's more, the cost of a single transaction drops dramatically with a debit card system. Compare:

—Cash handing: 54¢

—Check handling: 60¢ to $1

—Credit card processing: $1.25 (without interest charges) and

—Debit card processing: less than 10¢.

Debit systems especially help an independent marketer acquire a larger customer base without incurring the fees associated with credit cards. One Buffalo, N.Y., marketer who has installed POS terminals at four of his outlets points to a typical 3% credit card processing fee as prohibitive when profit margins are so low.

A Chicago-area marketer says debit card use will promote larger purchases and could add as much as 200,000 gal./year in volume. He plans to target the system at customers using plastic.

Depending on the number of functions, terminal controller equipment costs anywhere from $8,000 to $25,000, with a typical range of $10,000 to $12,000.

David A. O'Connor, president of EFT Group, Inc. a suburban Washington,

By Tim Grace
Staff Reporter

D.C.-based network of 46 financial institutions has compiled cost/savings figures for such systems.

He says the average system hardware costs about $6,400 a year to operate and maintain, after depreciation. On that basis, a retailer must have 5,000 debit card transactions per month to lower the cost of one transaction to 10¢—a far cry from check or credit card transaction costs.

Installing a personal identification number (PIN) pad (vital to system security), brings average monthly system expenses to $750. At 4,000 transactions per month, the cost of a transaction with the added equipment would be about 19¢.

Full-scale application of these systems is expected at gasoline outlets by 1986 or 1987, according to observers. And, a growing tide of major company pilot programs only reinforces such speculation.

Mobil, for example, is on the cutting edge of this movement, laying out an estimated $10-million for equipment at 2,400 stations while signing agreements with regional financial institutions to provide electronic authorization of debit transactions [NPN—Dec. '83, p29 and page 33 of this issue].

Demand for Efficiency

To understand this trend, one must look back to the 1973 Arab oil embargo. The oil industry enjoyed healthy profits and could afford inefficient operations, typified by the use of paper-based money transfer.

But while the oil shock inflated profits, it also let the air out of product demand. The recent oil glut and greater competition have forced marketers to reevaluate every phase of operations, most importantly, operating costs.

Market pressures for efficiency prompted several major companies to impose surcharges on credit card purchases, and led Arco to eliminate its credit card entirely in April 1982.

These increased costs, coupled with percentage transaction fees and the cost of float has prompted many industry observers to predict that electronic funds transfer will become a universal form of payment by the end of the decade.

Unscrambling the Systems

In spite of the many different systems being tested, there are basic similarities in terminal function and how they fit into the transfer scenario.

In most instances, a customer inserts a credit or debit card which contains a magnetic stripe with a personal code. Depending on the system, the customer either enters his PIN number into the terminal or the terminal simply reads the code imprinted on the magnetic strip.

If the customer's credit line is approved, the pump is activated and the transaction begins. Depending on whether the system is debit or credit, fund transfer can be instantaneous or can take anywhere from one to 30 days.

Terminals can be either island-mounted or located within the store or kiosk. Often,

> A $6,400 system should take 5,000 debit cards a month to lower a transaction cost to 10¢.
>
> —*O'Connor*

POS terminals inside the store are attendant-operated, although the customer can also sweep the card's magnetic strip through for authorization.

Industry observers generally agree that island-mounted terminals are more advantageous to both the retailer and consumer, saving convenience and time.

"The key is the amount of time that it takes to walk over to the kiosk to get approval," says Ron Burkhart, president of Golden Gallon Co., Chattanooga, Tenn. He says the use of any POS terminal saves five to six minutes off of a transaction as the attendant does not need to scan credit card lists for credit-worthiness.

Other marketers like the idea of freeing the attendant to perform other services, rather than gasoline purchases, in order to cut the net cost of labor. Regardless of the mode of operation, instantaneous EFT effectively eliminates float time.

The Cost of Paying

Lower retail margins these days have made jobbers increasingly concerned about the cost of credit and float time. Debit-based funds transfer becomes especially attractive to oil marketers in comparing transaction cost differences between cash, credit cards, checks and debit systems.

Dr. Martin "John" Atalla, president of Atalla Corp., a San Jose, Calif.-based manufacturer of PIN systems, has compiled figures outlining the transaction fees associated with each of the four primary payment systems.

It costs a retailer 54¢ to handle each cash transaction, which accounts for some 64% of all purchases. And, the cost to handle checks and credit cards are even higher.

Transaction fees associated with checks—which are used in 8.9% of gasoline purchases—range from 60¢ to $1 per check. The cost of a credit card transaction from start to finish is $1.

Atalla says that U.S. consumers wrote an estimated 48-billion checks for goods and services last year, with total processing costs adding to $25-billion.

An oil company's card costs that company $1.25 per transaction, escalating to $1.61 when 2% interest over a 60 day payment period is added.

Tests conducted with debit systems so far show transaction fees to be less than 5¢ per transaction with the cost of communication adding another 5¢. "That's what all the excitement is about," says Atalla.

The excitement surrounding debit/credit EFT systems ebbs, however, when someone raises the question of who will pay the fees.

"As systems are installed and each participant discovers the benefits of having the system, then we can decide who pays," says EFT Group's O'Connor.

Likewise, Mobil has taken a wait-and-see attitude on debit card transaction fees. In its California test, for instance, Mobil and First Interstate and Crocker National banks reportedly have agreed not to charge one another for Mobil's use of those banks' debit cards for the time being.

A few independent marketers, however, are trying—some successfully—to pursuade their debit card network banks to absorb transaction costs "for the privilege of access to funds of the jobber's customers."

Many Advantages

Golden Gallon installed POS terminals at 80 of its 103 gasoline outlets this month. Burkhart believes the system will help him compete with majors in the area.

"The card will increase the amount of money the consumer spends per transac-

tion," says the 88-million-gal./year jobber. "I think the system will increase sales by about 8% in the beginning."

Paul Hefner, vice president at First Interstate Bancorps, Los Angeles, Calif., says the average ticket for gasoline credit purchases ranges from $16 to $18. "If we can get today's cash buyer to convert to the new method, there is every likelihood that he'll buy more gasoline per visit."

"Gasoline sales are a function of price, price, price and convenience. So, the new payment system will succeed only if it doesn't affect price at the pump," Hefner cautions.

Jobbers also stand to benefit from other terminal applications.

Prototype terminals being tested by Texaco provide readings on gallonage levels in underground tanks along with the tanks' water content. Daily readouts of this information are stored on a host computer.

Full-scale application of such diverse functions are about one year away. Other benefits, such as elimination of chargebacks, are being realized today. Because transactions must be authorized before they can begin, marketers are spared the cost of chargebacks that range from 0.5% to 1.5%.

"EFT also extends the depositing day," notes Helen Tepperman, manager of business services for Wells Fargo Bank, San Francisco, Calif. Wells Fargo has been conducting tests of a debit system in conjunction with 23 independent Shell dealers since November 1982 [NPN—April '83, p49].

"You don't have to cut off your receipts and get them to the armored car and to the bank by 3 p.m.," she says.

Switching networks also serve the oil marketing industry as card authorization centers. Perhaps the best known network today is the J.C. Penney system which began in 1975 as a link between 1,700 Penney's stores. Penney's currently is

Remote Services' Spears says motorists purchase 40% more fuel with card acceptors.

Multi-function island terminals increase the customer base, as well as reduce costs.

conducting a test with Shell in Houston.

Robert Mooney, president of JCPenney Systems, says his company pays all telecommunications costs inherent in debit/credit systems. Costs range from 9¢ to 14¢ per transaction. Penney's network, along with others, provides the retail outlet with electronic authorization of credit cards and an additional card base.

Systems onstream are seeing anywhere from 95% to 99% uptime. Early problems with interrupted phone service, temporary power outages and jamming of receipts are becoming less frequent, according to Mooney.

Not All Roses

Observers say the biggest stumbling block to public acceptance is that a debit transaction places the consumer's money at risk. With paper-based transactions, the bank's money is tied up. In a debit transaction, by the time the consumer realizes a mistake has been made, the money is gone.

The disadvantages to the jobber appear when a system is implemented without sufficient planning. O'Connor cautions that in order to make POS profitable, jobbers must have at least a three-year development plan involving employee training, consumer education and system experimentation.

State of the Art

Some systems now being tested are unable to accept cash or a variety of cards. As a result, retailers have questioned whether the investment in POS systems will yield increased business. But other systems can accept virtually any card.

"I feel that a jobber is spreading himself too thin signing up with a network which only accepts bank debit cards," says Burkhart. He says the system he uses, Atlanta-based Buypass, accepts all cards and could increase his business by 35% within two years.

Most systems on the market can control up to eight pumps, with pricing capability for as many as six grades of fuel.

The incorporation of cash acceptors by some manufacturers in a POS system underscores the findings of a Dresser-Wayne task force on electronic transfer systems.

The participants found that in order to achieve a smooth transition from paper to electronics, a system must support both methods during the interim.

Some systems offer other features such as receipts, which provide customers with information such as purchase date, location, and telephone numbers where consumers can dispute billing errors.

Other systems provide specialized readouts designed to appeal to fleet operators. Computer printouts detail information as diverse as vehicle number, driver, date, gallons purchased, fuel type, mileage and warnings when a vehicle is scheduled for maintenance. Additional applications will be needed to justify system expense, however.

"We're all looking at substantial increases in local telephone rates," says O'Connor. The increases, primarily stemming from the AT&T breakup, will be a prime motivating factor behind the use of multi-application systems which support inventory and management information data, O'Connor says.

Majors' Pilots

The number of pilot EFT and POS programs seems to be increasing by the hour. Many are being carried out by major oil companies with assistance from various banks and bank networks. The Mobil test in the Washington, D.C., area by far is the most extensive on-line system.

Some 2-million bank card holders in the MOST and CASH FLOW networks have access to the terminals, as do holders of

Mobil cards, VISA and MasterCard. That preceded a November announcement of the California network agreement—all designed for Mobil's eventual 2,400-unit capability marketwide.

Arco is doing something similar, installing the remainder of some 1,500 ARCOmatic terminals across the country as it tests debit systems at 25 Santa Clara, Calif., outlets [NPN—Oct. '83 p.20].

The test, which incorporates Bank of America Versatel cards, began last October and is scheduled to last six months. Results, according to Joseph Tebo, Arco's manager of sales development, have been encouraging.

"Studies show that 30% of customers buy gasoline using some type of card, 50% of those pay on time," says Tebo. Arco's entrance into debit card testing appears to be an effort to recoup some of the business lost when it abandoned its credit card.

The company will be conducting further tests with debit. Testing is scheduled to begin soon in San Diego and in Sacramento, the site of the first ARCOmatic.

Typically, most debit tests being conducted are rather new and results are hard to come by.

The Wells Fargo/Shell program in San Francisco, in operation since November 1982, remains a pilot until the two parties decide whether consumer interest warrants full-fledged implementation. That program enables 1.2-million holders of Wells Fargo EXPRESS BANKING cards to purchase gasoline at point of sale. Wells Fargo maintains accounts, while Shell pays monthly equipment rental and transaction fees.

"This (POS) is wonderful when it works right," says Tepperman of Wells Fargo. "It's awful when it goes wrong." Tepperman says a wrong debit transaction could cost as much as $3 to $4 to correct and reprocess.

The bank also has provided incentives for the consumer to use EXPRESS BANKING cards. Promotions have included $5 off the first purchase with the card.

Still, results have been less than optimistic. Tepperman says the test has yielded an average of two transactions per day since its inception. "It's a combination of not being a common event in the consumer's life and a case of not having a big enough buying base in one bank."

To achieve success, Tepperman says the terminals must eventually accept all bank cards to increase consumer options.

Exxon Corp. is banking on its own debit card, the AutoCheck card, as a means of speeding up the paying process. The company will not reveal how many of the cards have been issued.

A test underway at 84 Phoenix, Ariz., stations is an effort to receive payment from Exxon credit card holders in two days rather than 30. Purchases are charged to the consumer's personal checking account through Chase Manhattan Bank.

An industry observer says the cards, which are sent unsolicited to Exxon credit card holders are a means of "shifting consumers away from credit to debit."

Sun is another major to announce its participation in debit testing. The company will be sending new magnetic stripe cards to its 3-million credit card holders. An electronic credit card system will be tested at company owned stations in suburban Philadelphia this year. The outlets will only accept the Sunoco card, according to Diebold, Inc., the manufacturer of the equipment to be used in the test.

Receipts will provide the consumer with information on account status, price of transaction, date and grade of fuel. Information is immediately transferred to Sun's credit card center, and the consumer is billed monthly.

While the majors also are clearly interested in the efficiency promised from electronic debit/credit terminals, independents are continuing to make arrangements with financial institutions in an effort to get a jump on the competition.

One cash sale costs retailers 54¢, versus 10¢ with debit cards.

—Atalla

Members-only Gascard Club foresee entering retail market with new debit agreement.

The test by Remote Services (the gasoline retailing subsidiary of Conna Corp.) at Convenient Food Mart outlets in Louisville and Lexington, Ky., began in December 1982 and is now in place at more than 100 convenience store locations [NPN—June '83, p41].

Remote president John Spears III reports that the average motorist at the locations purchased 45% more gasoline because of the card acceptors. VISA and MasterCard are accepted at the installations with card processing provided by First Security National Bank of Lexington. Payment is received several days following the transaction.

"This is the first time in 25 years in the oil industry that I've heard a customer label buying gas 'fun,'" says Spears, a 14-year marketing executive at Ashland before joining Remote in 1972.

Other independents experimenting with the terminals include Robo in Buffalo, N.Y.; Gascard, a Del Mar, Calif.-based network of unattended fueling stations; and Bell Fuels, Chicago, Ill.

Peter Schmitt, Robo president, says the processing fee associated with bank cards made credit card acceptance impossible at his four 200,000-gal./month outlets. Schmitt figures that he'll recoup some of the credit card business from the 1-million debit card holders of the Metroteller bank, which is providing the switching network for the tests.

"The best part is not having to deal with cash, getting it to the bank," says Schmitt, who is paying $10,000 each for the prototype systems controlling six

pumps at each of his locations.

"Initially, it will surprise me if 15% of my business comes from the card system, but it should help with the margins," he says. Schmitt says typical rack-to-retail margins for Buffalo-area indies are roughly 3¢ gal.

Gascard, up until late last year, was strictly a members-only operation with outlets in California, New Mexico and Texas.

When the franchise last month announced an agreement with Citicorp, Sears Roebuck and E.F. Hutton to serve as networks in a debit system, Gascard considered entering the retail market sometime in the future.

Bell Fuels in early December was trying to finalize agreements with a prominent national network and a local bank in order to introduce a debit card system at its Bensenville, Ill., station.

"If I couldn't pick up an extra 200,000 gal. it wouldn't be worth it," says Tom Campbell, director of operations. "But the average fill on a credit card is higher than on a cash transaction. We need to do this to keep the majors from dominating," he says.

Too Much Too Soon?

As shown by the slow acceptance of debit in San Francisco, the introduction of debit/credit terminals into a market does not mean instant success.

Some of the initial drawbacks appear to be communication costs for the individual retailer, bugs in the systems and the promise of too much too soon.

Poul Moller, who formed International Fuel Corp. (IFC) in 1982 after selling his interest in USA Petroleum, predicted that 1,000 stations would sign up for his system by the end of the year.

The system was tested at several stations, with IFC footing the cost of transactions. As of early December, only three stations were testing the system nationwide. A total of 1,000 card holders had access to the terminals.

Deane Stewart, a Springfield, Ill., jobber experimented with POS in 1982, with one of his stations on-line with the Easy Answer network. The volume of card use never accounted for more than 2% of total transactions.

A Chicago area marketer also cites what he calls the banks' "tendency to rush into these tests" without a thorough knowledge of the system's costs, demands and how transaction fees are charged. "They should get their act together before starting these programs," he says.

EFT Over There

Electronic funds transfer is gaining widespread acceptance in Europe, and U.S. proponents are hoping the trend will take root here, across the Atlantic.

In Norway, one Shell station over three months achieved 20% of its total gasoline volume by the use of the "Mini Bank Card." Another station, according to Robin Lee of Shell Norske, had 367 debit transactions during one 24-hour period.

Interstate Bancorps' Paul Hefner says such success eventually will be duplicated in the U.S. because EFT technology meets the all-important success criteria: price and convenience.

Unattended Stations

Of course the inevitable result of full-scale debit systems in petroleum marketing is the unattended service station. *The Nilson Report*, a newsletter for credit card executives, predicts that unattended stations will dominate marketing by 1992.

What could squelch that scenario, however, is fire codes that prohibit unattended stations. Several Gascard clubs across the country are avoiding that law through making gasoline purchases at their outlets an exclusive right of card holders.

Unattended stations, and debit terminals for that matter, will not replace paper-based money transfer as the universal mode of exchange if the public does not accept the change, however.

Point-of-sale, according to John Atalla, will be going through a period of "chaos and confusion" for the next three years or so, as participants at all levels are educated and the economics are sorted out.

Wide-scale acceptance by the public, however, is possible with incentives, suggests Tepperman.

"A new group of people will be the hard core purchasers of the 80s," she says. "This group has a fascination with options, so they'll look at debit card promotion as one more option. Experiments over the next year will determine how far we get in the learning process."

The jobber must spend a lot of time becoming familiar with this system, says EFT Group's O'Connor. That means a three-year development plan which will enable the merchant to incorporate the system into as many applications as possible.

All in all, the keys to a successful electronic money transfer system, according to observers, are: consumer acceptance of "impersonal" hardware, careful selection of compatible equipment, acceptance of few but widely used debit and credit cards, solid product security and tailoring to the local level, where repeat business is assured. NPN

Fast Money Coming to Racks, Some Distributors Discover

While some marketers are excited about one day installing debit card terminals at their pump islands, they tend to be anxious about facing a POS/debit system at their suppliers' racks.

The prospect of major oil companies installing such systems at supply terminals poses a problem for the small and large jobber alike. Instead of having a maximum 30 to 45 days to pay for product, a jobber might soon find that he must transmit funds c.o.d. through a debit system.

"It would hurt our purchases to a certain extent," says Bob Gregg, a Phillips and Conoco jobber in Beaver, Okla. Gregg, who himself is considering installing debit terminals at his retail outlets, says the company would have to rely more heavily on prompt payment from customers in order to cope with his own loss of float.

Another Oklahoma jobber says that his suppliers are "doing everything they can" to speed up payments. He cites curtailing of float terms and refers to other jobbers who have been placed on a c.o.d. basis.

Yet another jobber, heavily into debit testing at the retail level, feels those jobbers most able to cope with debit terminals at the rack will be those who are able to pay early and receive a discount in the process.

Gulf has taken the first step in what some believe might be a move in the debit rack direction. The company is installing EFT systems at terminals but is allowing jobbers an extra four days before transferring funds, less a 1% discount. Those jobbers not wishing to participate in the program have 10 days before having to pay for product. The company says response to the system has been favorable.

Jack Allen, a Steubenville, Ohio, jobber finds the extra time advantageous to his business. "We're also receiving cash payments for card purchases we relay to Gulf much quicker," he says.

Conoco is offering jobbers a shot at a quick-payment plan too. Participating jobbers allow Conoco to debit accounts almost immediately for product purchases but also receive prompt credit for card receipts.

The Cost of A Transaction

Cash	*5¢
Oil company credit card	$1.25
Bank credit card	$1.00
Check	60¢ to $1.00
Debit card	10¢

*Cost of handling

Source: Atlalla Corp., San Jose, Calif.

1984 Outlook Brightens for Oil Heat

Despite the fact that the heating seasons of '82-'83 and the first half of '83-'84 have been disappointing for fuel oil marketers, the word's going around that better days and brighter times are on the horizon for the distillate industry.

Industry circles are talking now of some technological breakthroughs that will mean improved equipment, higher operating efficiencies and enhanced opportunities to fight gas and electric competition head-on.

One big breakthrough is being field-tested this winter, sources say. If all goes well, it will make its debut sometime next spring. It is an oil-fired furnace, using the condensing mode and promising an efficiency rate of 95% to 97%.

The best of the conventional oil-fired equipment already on the market has an efficiency rate of 85% to 88%. So, the increase of 10% to 12% isn't necessarily a mammoth leap upwards. But it's infinitely better than conventional gas equipment whose efficiency rating is in the 70% to 75% range.

Gas also is working on a condensing mode, but has been experiencing great difficulty in overcoming some of the inherent problems.

A point to remember is that when gas does perfect its condensing mode furnace and achieve the same 95% to 97% efficiency rate—and assuming that the oil-fired model will make its scheduled appearance next spring—both fuels will be evenly matched in sales appeal.

It isn't hard to remember the dark days when oil-fired equipment generally was disparaged as being inferior in efficiency to conventional gas equipment. Many consumers still believe gas is more efficient and burns hotter than oil.

Takes Flight in Spring

Word of the condensing mode equipment for distillate comes from L.M. (Bud) Woodworth, who is with the Brookhaven National Laboratory's Associated Industries, Inc., at Upton, N.Y. This unit works on government-industry contracts to explore research and development, and to function as sort of an impartial testing laboratory to verify technological achievements.

Woodsworth told *NPN* in late November that he was privy to the status of the development but that he was not privileged at the time to reveal the manufacturer's name.

"He's doing substantial field-testing now and expects to make a formal announcement on the subject in the spring," he said.

Industry sources say several manufacturers have the capability of developing a condensing mode furnace, which uses a different technology than conventional combustion burner-heat exchanger approaches.

But there hasn't been too much incentive to do it because of research and development costs, complexity of equipment, and innumerable problems involving soot, sulfur and corrosion. And, there always was a question in the minds of manufacturer who did proceed: Would the space-heating industry embrace such a technological breakthrough and support it?

Industry sources guessed that the new condensing mode equipment would be about the same size or maybe slightly larger than conventional equipment and that the cost would be somewhat higher at the outset. But the higher efficiency would help ameliorate that. Installation would pose no problem for skilled technicians, these sources said.

Low-Input Burners

Woodworth also noted that progress is being made by researchers on low-input burners but that "success here isn't immediate . . . I'd say it's more like two years from now."

About the best that conventional burners can do at this time is .05 gal./hour. Lower than that, the nozzles clog repeatedly, meaning that a different form of atomization is needed. The target is perhaps .02 gal./hour, which means that the burner would be on longer but at a lower rate with less heat wasted than happens in off-on cycles.

Success in this concept also would bring a rich plum for the fuel oil industry and home builders. Because vented heat

By J. Richard Stoner
Executive Editor

Aside from equipment strides, 1A dealers are promoting heavily oil's price and benefits.

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would be lower in temperature, it would no longer be necessary to build brick and lined chimneys to the rooftop.

Because chimneys add $1,000 or more to the construction cost, the development would make fuel oil more competitive with gas, which requires only a simply metal vent either to the roof or to the side of the structure. It also would undermine electric heat's promotional claim that chimneys and fireplaces leak more warmth than they save.

Another exciting development currently being investigated by both automotive and fuel oil equipment manufacturers is a valve with a mesh screen that causes gasoline and distillate to vaporize into finer droplets than possible with conventional equipment.

The inventor says the valve and screen imbedded in a nozzle will produce droplets of 10 microns in size compared with the 50-to-150 micron beads that are sprayed into combustion chambers currently.

This inventor says he has a patent on this and a number of other items that he has developed. Chrysler Corp. was said to be the automotive firm that's looking at the valve, while the identity of the fuel oil equipment maker was not disclosed.

This valve, however, could be the long-sought nozzle needed for the low input burner—if it's commercially successful and viable.

Promotion Conference

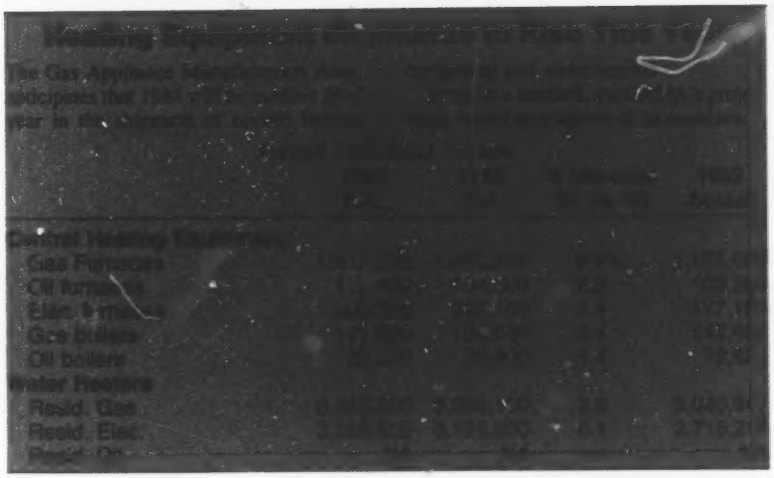
Against this background, there's another cheering note of optimism for the hard-pressed distillate marketers.

The National Oil Jobbers Council already has begun work on another major oil heat promotional conference to be held this summer, probably in August and most likely in Alexandria, Va. That's where its first effort attracted an almost-overflow

audience and a rebirth of unbridled enthusiasm throughout the industry [NPN—Oct. '83, p44].

"We're getting off to an early start on the 1984 conference because the one last August unquestionably was far more successful than we ever dreamed it would be," said NOJC vice president Mark Decker.

"We would like to have more of the show-and-do displays of local oil heat promotion programs, so that we all can share



in the progress that's being made," he said. "We'd also like to get more of our manufacturer members more involved in the next conference. There are a lot of things going on that they could tell our distributors and our promotion people."

Fuel oil marketers were heartened by last year's promotional conference. Some thought that fuel oil had made a "quantum leap" in setting the stage for a comeback when many people were glumly looking at an equally glum future.

A good indication of NOJC's expanded collective thinking was the appointment of Dugald Stewart, of Griffin-Galbraith Fuel Co., Tacoma, Wash., as chairman of the council's heating fuels committee.

Stewart and his son Greg, who is executive director of the Oil Heat Institute of Oregon, both participated in the 1983 promotional conference in Alexandria.

More than that, however, the appointment of Stewart brings the Pacific Northwest closer into the council's fuel oil activities—more so than ever in the past.

"The people up in the Pacific Northwest not only have some strong competition but they also have some innovative and exciting ideas about promotion," said one committee member. "We can learn a lot from them.

Stewart succeeded Bob Parr, of D.J. Parr, Lebanon, Pa., who played a key role in 1983 in reviving the concept of oil heat promotion under NOJC auspices.

Rough Markets

The road ahead could be a tough one for many heating oil marketers.

Most took a beating last winter when the weather turned out to be the warmest in three decades—after forecasts that predicted the coldest winter in a century.

Forecasts for "normal" weather for this heating season got off to a hollow start, with September and October running some 5% warmer than 1982. November hardly compensated, putting a damper on any real accumulation of degree days.

Distillate demand took a surprising upturn, nevertheless, in the final quarter of 1983, as did other petroleum products—except residual fuel oil, which continued its prolonged slump.

Distillates were expected to average a shade over 3-million b/d in the final three months, up 2.4% over the same period of 1982. *But* more of that—roughly 60%—went into diesel fuel for highway transportation and stationary motors and utilities than into residential furnaces.

With a glut of heating oil supplies, however, prices and margins continued to be depressed last month. The slow movement of product and the anxiety of many marketers to build volume added to these pricing and margin pressures with discount cash-and-carry prices for home deliveries as much as 10¢ to 12¢ below normal "street" prices.

There isn't much likelihood that marketplaces will change much in the months ahead, barring a prolonged seige of cold weather this quarter. Even the futures markets take a dim view of things, projecting wholesale prices in the low 80¢ gal. range through the first four months of the new year. Futures markets are speculative, however, and react rapidly to weather, news and political developments.

Home heating oil prices averaged around $1.20 gal. during the last quarter of 1982, but averaged at least 10¢ gal. below that during the comparable period last month. Last spring, after the disasterously long spell of warm weather, consumer prices averaged $1.03 gal., while deliveries under $1.00 gal. were not unusual.

One note of relative cheer for the fuel oil marketers: As their prices eroded, consumer costs of natural gas continued to rise. In the wake of Congress' failure to reach any agreement on even limited decontrol of gas, it was estimated that gas customers would have to pay as much as 15% more for their supplies this winter—even though supplies are more than adequate to meet demand. NPN

TBA Briefs

Battery Market Changing; Better Days Ahead?

The battery industry has gone through many changes over the past several years, and will continue to evolve as the product improves, says Milton C. Zilis, vice president of Johnson Controls, Inc., the parent company of Globe Battery.

At the same time, recent unit shipment figures indicate some recovery over and beyond seasonal changes. [See table.]

Zilis says that in order to cope with market changes, companies must invest in the "protection and improvement of their market position with top quality products and service." Among the changes in the product Zelis discusses is battery size.

"As automobiles and trucks have evolved to smaller, fuel-efficient machines, the battery has followed right along, getting smaller and more efficient at the same time," he says.

While batteries have become smaller, Zilis points out that lead prices have fallen. If they remain low, he says pressure for alternative chemistries and unit construction will be reduced.

However, battery configurations will continue to change, says Zilis. "We can expect an overall reduction in size to almost half of what is considered 'normal'."

Zilis says the use of a second battery installed in automobiles is feasible, considering the possible need for a backup power system to handle computer memory requirements.

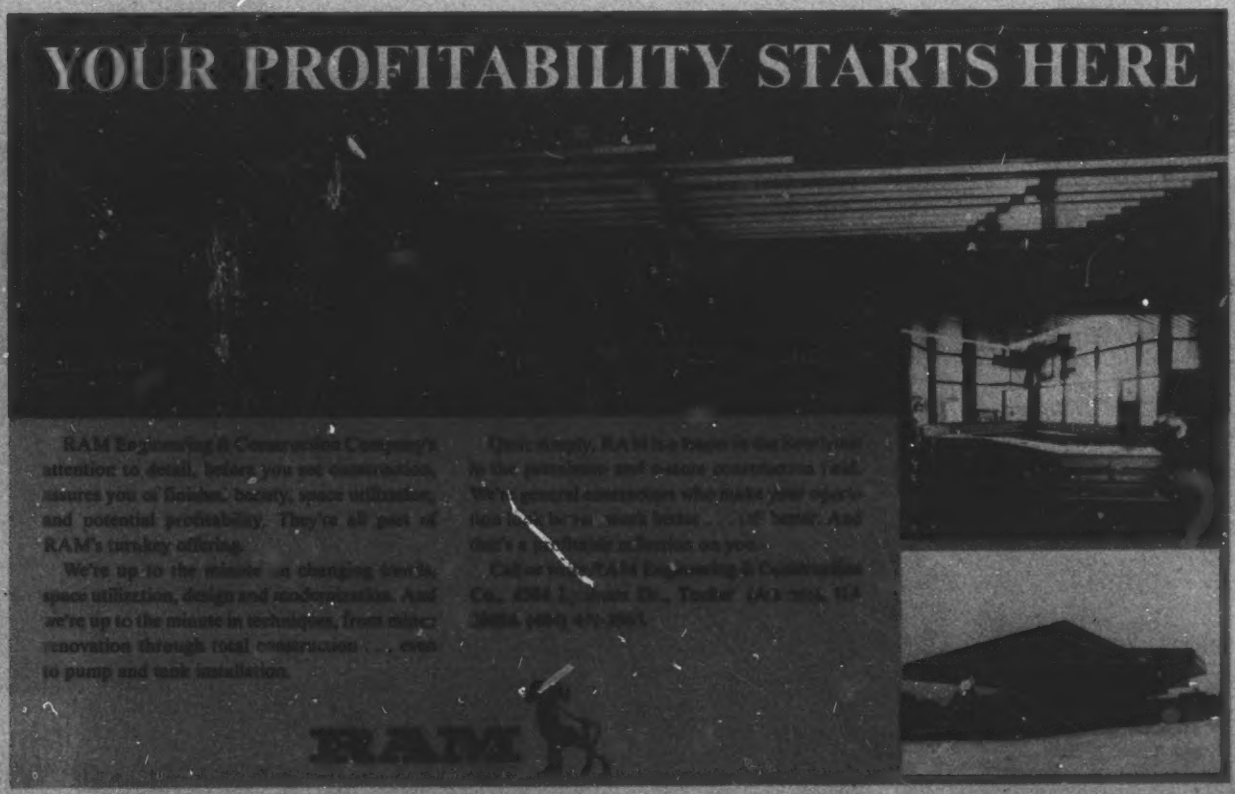
While Zilis notes changes and cutbacks in the industry, figures from Battery Council International tend to show an upturn in replacement battery shipments.

A council spokeswoman says increases in May and June arose from seasonal trends and the general upturn in the economy which has led to increased car sales. *NPN*

Shipments of Replacement Batteries by United States Manufacturers

	1983		1982		% Change	
	Month	Year to Date	Month	Year to Date	Month	Year to Date
Jan.	3,707,578	3,707,578	4,897,079	4,897,079	−24.29%	−24.29%
Feb.	3,070,134	6,777,712	4,268,518	9,165,597	−28.07	−26.05
March	3,730,055	10,507,767	3,838,828	13,004,425	− 2.83	−19.20
April	3,508,708	14,016,475	3,610,985	16,615,410	− 2.83	−15.64
May	3,720,321	17,736,796	3,584,287	20,199,697	+ 3.80	−12.19
June	4,032,340	21,769,136	3,639,948	23,839,645	+10.70	− 8.69
July	3,914,246	25,683,382	3,628,959	27,468,604	+ 7.86	− 6.50
Aug.	5,099,991	30,783,373	4,749,514	32,218,118	+ 7.38	− 4.45
Sept.	6,373,487	37,156,860	5,819,415	38,037,533	+ 9.52	− 2.32
Oct	6,548,057	43,704,917	5,659,738	43,697,271	+15.70	− 0.02
Nov.			5,237,208	48,934,479		
Dec.			5,279,976	54,214,455		

Source: Battery Council International



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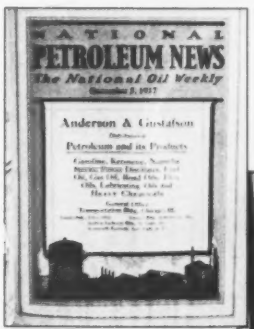

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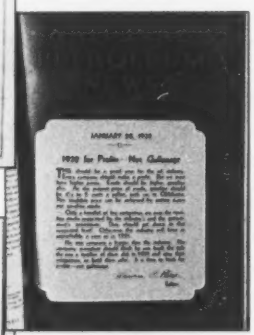

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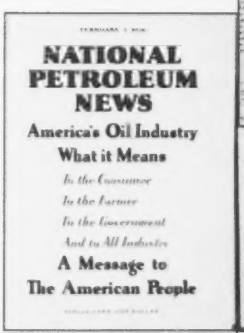

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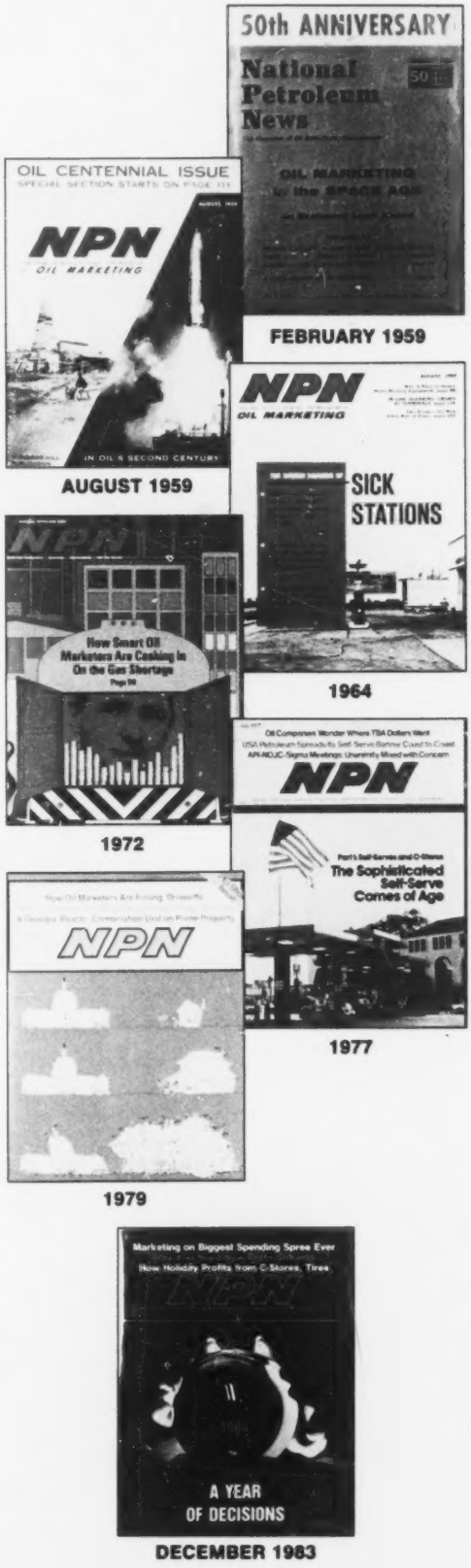

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• TRENDS

Has Gasoline Marketing Reached a Crossroad?

Will the ultra-expensive, high-volume type of retail facility now being built by "multi-line" retailers finish off the traditional "stand-alone" type of service station?

Such questions are being raised as the intense scramble for gallonage continues in today's virtually no-growth market.

History has taught gasoline marketers never to say never about new low-cost concepts. Frank Urich began the self-service trend following World War II with a $35,000 station in Los Angeles. Some of the early convenience store pioneers had initial investments of $10,000 or less. [See story on page 92.]

But such trend-setting ideas of the past have evolved into ultra-expensive facilities today. Marketers now talk in terms of $250,000 minimum investments for multi-pump C-stores, and the tabs on some run up to $1-million or more. For such outlays, they usually want a facility to pump at least 150,000 gal./month, with the targets much higher for the more expensive ones.

John Roscoe—a C-store chain owner who describes himself as a farmer, oil and gas investor, and stockholder in many oil companies—is one who believes gasoline marketing in America has, indeed, reached a crossroads.

Roscoe is one of the many convenience store owners who, in recent years, has found the gasoline business something good to be into. In 1981, the most recent numbers available, he had 140 stores in four western states selling almost 7-million gal. of gasoline per month. Since gasoline has become a big part of his overall business, Roscoe spends considerable time studying the oil industry.

One thing he has learned, says Roscoe, is that farmers and chemical engineers who run oil companies both tend to be production specialists unconcerned about selling. This is bad for the oil companies, he concludes, because "right now, marketing is the number one problem for the oil companies." Instead of recognizing this, though, most have been reducing their marketing staffs to "minimal levels."

Roscoe believes the years ahead will see a "rebirth of effective and efficient gasoline marketing" in the U.S. But his concept of "effective and efficient" marketing should strike fear in the hearts of those who believe pre-1980s-type gasoline marketing will some day return.

In his 1982 report about oil companies' past-year performance, Roscoe asked: "What will the margin on a gallon of gasoline be in the future?" His answer was:

"What is the price differential in a given location that is necessary to develop 400,000 gal. of gasoline...a month? What is the value of 40,000 customers to a multiline retailer? The margin...will hinge on this value. In the short run at least, this is possibly a negative margin. In the long run, it may be 2¢ a gallon."

Roscoe believes the multi-line type of gasoline retailer will build new competitive pressures into existing stand-alone units and force their modification, closure or subsidization. He says he can't understand why some oil companies subsidize stations and lose money in marketing. The cost of subsidization to maintain market share is likely to be "very great" in the 1980s, he adds.

Roscoe's opinions of the gasoline business are of special interest, because he looks at it from the C-store owner's viewpoint. Quite a few gasoline marketers who are into C-stores seem to agree with most of his observations.

While most oil marketers might question Roscoe's assertion of operating on a "negative" margin, or maybe 2¢ gal. "in the long run," they agree a multi-line retail facility can get by on a far lower fuel margin than can most gasoline-only facilities.

Increasingly, marketers with store facilities see a relationship between high-volume gasoline sales and store sales. Says Roscoe, "When a great volume of gasoline is sold, it develops a great amount of customer traffic that can be of value to a multi-line retailer."

With such a dual purpose for attracting lots of customers, the multi-line retailer is usually the low-price leader at his pumps in a given market. Chances are, he also has the best-looking retail facilities, because he knows that helps attract customers.

It is possible that some low-investment innovation for selling gasoline will come along to upstage the expensive multi-line facilities. For now, though, they seem to be in the driver's seat, making it tough for traditional stand-alone units to compete. ***NPN 75th***

• MARKETPLACE AT A GLANCE

AVERAGE GASOLINE PRICES IN THE U.S. (¢ per gal.)

NOVEMBER	Gasoline (All types)	Leaded Regular	Unleaded Regular	Leaded Premium
U.S. City Avg.	$1.224	$1.156	$1.241	$1.356
Regions:				
Northeast	1.253	1.186	1.256	NA
North Central	1.250	1.199	1.273	NA
South	1.206	1.135	1.218	NA
West	1.191	1.107	1.214	1.351

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.

STOCKS (Add 000 bbl.)

	12/30/83	12/31/82
Gasoline (total)	232,464	240,564
Gasoline (unleaded)*	96,057	96,861
Jet Kerosine **	34,133	32,230
Distillates	148,802	179,869
Residual	50,872	67,187

**Included in gasoline total.*

***Jet kero only; totals no longer kept by API or DOE.*

Source: American Petroleum Institute.

NPN

NATIONAL PETROLEUM NEWS FEBRUARY 1984

Post-Embargo Station Shakeout Continues; Optimal Level Estimated Same as in 1930s

Fresh government statistics confirm that the service station shakeout that began back in 1973 continued unabated through 1983, with more outlets than anticipated vanishing from the nation's streets and highways in that 12-month period.

The new population total for the end of 1983 is 136,570. This is 2,680 units less than had been projected last January when the annual government forecast stated it would be 139,250 stations on Dec. 31 [NPN—Feb '83, p27].

Not only that, there's no end in sight for the service station crunch. The government forecast for 1984 is that the total will shrink anew to 130,000 stations by next Dec. 31. That would be roughly equal to the population in the early 1930s.

The current situation is tinged with irony for *NPN* as it observes its 75th anniversary. During most of the magazine's history, the service station story was one of near-continual building, with competing outlets and brands on all four corners of many streets and intersections.

There was almost a frenzy during the 1950s and 1960s when the net additions were counted in the thousands. Today, it's the other way around, and the population is going down at a faster rate than it ever was built up.

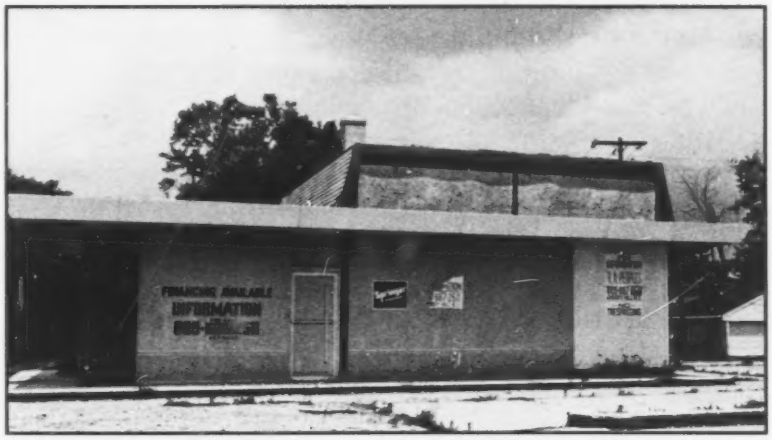
All is not gloom in this negative report, however.

For example, there is no shortage of service stations, despite the fact the number of automobiles, trucks and buses on the road is at an all-time high—more than 165-million vehicles now and increasing annually.

The stations that are disappearing are generally on the smaller side—30,000 to 40,000 gal. month. In their places are being built the big super-stations—the 100,000-to 200,000-gal.-month-plus pumpers that are more economical to operate and frequently are on a seven-day, 24-hour basis. Most are self-service stations, which seem to have greater appeal to motorists everywhere.

The industry is spending billions of dollars on new marketing facilities and programs as the majors and the minors reposition themselves and intensify their competition for gasoline gallonage [NPN—Dec. '83, p27].

McGraw-Hill's annual survey, issued in mid-November, said the oil companies had projected marketing expansion and development expenditures of $2.1-billion in 1983, $2.6-billion in 1984 and $2.8-billion in 1985—a three-year total of $7.5-billion.



Per-station sales in '84 may be 2.5% above '83's, but 6,500 units will close up.

These are among the highest investments ever targeted for marketing facilities, and they come in an era of gasoline surpluses, depressed prices and margins, cost-cutting, alcohol additives, and regrouping by all in the marketplaces.

The government report states the dollar sales at service stations slipped slightly in 1983—down a little less than 1% below 1982's total of $104.6-billion for gasoline and oil products and services only.

The 1983 total was put at $104.6-billion. It was far, far below the rosy projection of $114.5-billion that was made last January for 1983, however. The economic recession and the sharp drop-off in pump prices were to blame for this.

The 1984 outlook is mildly optimistic. Dollar volume at the service stations is expected to exceed $106.2-billion by the end of this year. That would be an increase of 2.5% over 1983, which would parallel other economic forecasts of minor to moderate growth in 1984.

The service-station data are compiled by the Bureau of Industrial Economics of the U.S. Department of Commerce as part of its annual report on franchising activities in the U.S. Copies of "Franchising in the U.S. Economy, 1982-1984," are available from the Superintendent of Documents in Washington D.C.

The BIE is somewhat of a sister organization to the U.S. Bureau of the Census, which also is a section of the Commerce Department. The Census Bureau took its quinquennial survey of retail businesses in 1982 but is still struggling to get the data ready for publication. Some may be available over the next several months, but complete state-by-state details probably

Station Count Down Yet Again

	1984	1983	1982	Percent Changes 1983-84	1982-83
Number of establishments	130,000	136,570	144,690	−4.8%	−5.6%
Company-owned	23,400	24,583	26,044		
Franchisee-owned	106,600	111,987	118,646		
Total sales of products and services (000,000)	$106,175	$103,587	$104,633	+2.5	−1.0
Company-owned	19,112	18,646	18,834		
Franchisee-owned	87,063	84,941	85,799		

Source: Bureau of Industrial Economics, U.S. Department of Commerce.

will not be out before the end of the year.

The BIE service-station totals are in keeping with the standards used by the Census Bureau, i.e., to be classified as a service station the facility must get 50% or more of its income from the sale of gasoline and oil products.

Arbitrarily excluded from these totals, therefore, are the thousands of pumps and stations at convenience stores, mass merchandisers, fleets and other places. The C-store world alone has a population close to 50,000, and it is estimated the almost half of these currently sell gasoline.

Last fall, the *Lundberg Letter* estimated the service station universe at 210,875 units. These would be the places where any motorist could drive in and buy gasoline. Industry sources regard the Lundberg estimate as an accurate report on the number of outlets on the American scene.

The BIE data showed that its service station population declined 5.6% in 1983 and is expected to drop another 4.8% in 1984.

If these percentages are applied to the Lundberg universe, then, it logically could mean that the total population at the end of 1983 was down 11,809 stations to 199,066; and will be down 9,555 stations more to 189,511 stations at the end of 1984.

An interesting offshoot of the BIE numbers is that as the service station population shrinks, the business volume per station theoretically increases because there are fewer of them to share the pie.

Thus, if the 1984 volume of business is projected at $106.2-billion and is to be split among 130,000 stations, the average per station would be $816,900. For 1983, it would be $103.6-billion and 136,570 stations, or an average of $758,500 per outlet. For 1982, the numbers were $104.4-billion and 144,690 stations, or $721,900 per station.

The U.S. service station population has been in a nose-dive since the Arab embargo days of the early 1970s. The peak population year (Census Bureau basis) was 226,500 stations in 1972.

The shake-out started in 1973 as supplies dried up and thousands of "Mom and Pop" outlets simply couldn't get enough gasoline to stay alive. By the end of 1974, about 30,000 stations had dropped out of the picture.

There has been no let-up in the interim slump. By 1977, the crunch had eliminated 50,000 stations and, by 1980, the number had risen to 75,000 stations.

Today, with 136,570 still in business, the 1983 population is down about 40% from the 1972 peak. By the end of 1984, it will be off 43%. In all, however, it will be like a fat man who has lost the flab around his waist—leaner, stronger and in a healthier position to do more business than ever.

Sales of TBA, Service To Rise 9% This Year

Auto products and services—a sort of catch-all in the Commerce Department's franchisee reports—didn't fare as well as expected in 1983 but continued to gain ground nevertheless in the number of establishments and the volume of sales.

The slowdown reflected the general retrenchment of business over the past two years.

This year's Bureau of Industrial Economics forecast put the 1984 total of establishments at 38,660, up 3.8% from last year's total of 36,614. Last January's forecast anticipated the 1983 total to be 41,496.

Sales of products and services were up significantly, however—8.1% in 1983 and an expected 9.3% in 1984. The projection for 1984 is $9.8-billion, versus $8.9-billion for 1983. These sales, however, include some non-automotive products, such as household appliances and garden supplies.

The category includes tire stores, car washes, parking services, brake parts and diagnostic shops, lube and oil change centers as well as others that specialize in the sale of aftermarket equipment.

TBA Product Sales Look Good for '84

	1984	1983	1982	Percent Changes 1984-83	1983-82
Number of establishments (a)	38,660	37,241	36,614	3.8%	1.7%
Company-owned	4,358	4,275	4,233	1.9	1.0
Franchisee-owned	34,302	32,966	32,381	4.1	1.8
Total sales of products and services (000,000) (b)	$9,782	$8,949	$8,278	9.3	8.1
Company-owned	3,052	2,828	2,610	7.9	8.4
Franchisee-owned	6,730	6,121	5,669	9.9	8.0

(a) Includes tire battery and accessory stores, auto and truck wash services, and brake and muffler repair and services.
(b) Includes sales of non-automotive products such as household appliances, garden supplies, etc.
Source: Bureau of Industrial Economics, U.S. Department of Economics, "Franchising in the Economy, 1982-1984."

C-Store Growth Differs By Type of Ownership

Although the convenience store universe appears to be growing steadily, the much smaller world of franchised convenience stores seemed to be in a quagmire last year where its population is concerned.

The universe generally is credited with having 50,000 or so stores, of which a little less than half sell gasoline and other oil products.

The Bureau of Industrial Economics of the U.S. Department of Commerce—which concerns itself only with the franchised companies—revised its numbers considerably in the 1982-84 report which it recently released.

A year ago, BIE projected a population of 16,256 franchised stores at the end of 1982, and 17,276 stores at the end of 1983 [NPN—Feb. '83, p28]. The new report downscaled these projections to 15,818 for 1982 and 15,086 for 1983. It predicts a total of 15,867 by the end of 1984.

The recession and the high cost of money had much to do with the retrenchment in 1983, as did the fact that one or more companies abandoned franchising operations in 1983.

Despite the fact that the number of franchised units seemed relatively static, sales volumes were not. The 1982 total was $9.8-billion; $10.2-billion for 1983; and $11.3-billion for 1984. Both 1982 and 1983 volumes were higher than had been forecast—by almost $600-million in 1982 and $8-million in 1983.

Franchised Stores in '83: A Muddled Year

	1984	1983	1982	Percent Changes 1983-84	1983-82
Number of establishments	15,867	15,086	15,818	+5.2%	−4.6%
Company-owned	8,821	8,436	9,517	4.6	−11.4
Franchisee-owned	7,046	6,650	6,301	6.0	−5.5
Total sales of products and services (000,000)	$11,279	$10,177	$9,818	10.8	3.7
Company-owned	6,760	6,094	6,119	10.9	−0.4
Franchisee-owned	4,519	4,082	3,698	10.7	10.4

Source: Bureau of Industrial Economics, U.S. Department of Commerce, "Franchising in the Economy, 1982-1984."

Market Faces Trials in Maturing Years

At the beginning of the 1970s, a person could drive across the United States on 25¢ gasoline, if he shopped a little along the way. Supply was no problem.

By late 1973, the price at the 'gas' pumps had doubled, and people were waiting in long lines at supply-short stations. The nation's long joy ride on cheap energy had come to an end. Neither it nor the oil industry would ever be quite the same again.

At first, oil marketing profited from the sporadic supply shortages and soaring prices of the 1970s. By the beginning of the 1980s, however, the industry again faced a serious problem.

For the first time in the memory of most present-day oil marketers, they faced a shrinking market with excess capacity. "We have had excess capacity before, but it has always been in a growing market," says one marketing VP. "Somebody is going to have to get out of the market."

Quite a few oil marketers have been getting out since the flush days of the Seventies, and there have been dramatic cutbacks in facilities.

The Shrinking Marketplace

Despite soaring prices in the 1970's, Americans kept increasing their gasoline and distillate purchases through 1978. Between 1970 and 1978, gasoline consumption increased 30.5% to 116.7-billion gal. Distillate demand was up during this same eight-year period some 35.7% to 52.8-billion gal.

But by 1981, the average retail price for gasoline in the U.S. had hit $1.31 gal., and distillates were up to almost $1.25. This represented a 267.3% increase in gasoline prices since 1970 and a 574.6% hike in distillates. Consumers began to cut back their buying of both products.

Domestic gasoline demand is currently running about 1-million b/d below what it was in 1978. Distillate demand in late 1983 was lagging about 700,000 b/d below its 1978 peak.

The gasoline demand slump is what really concerns marketers. Most experts don't see much improvement in gasoline demand now through the 1980s and possibly beyond.

This is the major reason most large oil companies today are sharply reducing their sales staffs and trimming back their refining and marketing facilities.

Marketers had begun culling out unprofitable service stations with the first supply shortage in 1973-74. With the end of federal price and supply controls in early 1981, jobbers and major company sales staffs became cutback targets.

Oil shocks and 'gas' lines of the '70s had a profound effect on the motoring public . . .

. . . while indies exploited their 2¢ to 3¢ gal. advantage over branded marketers.

There has been considerable shrinkage within the industry so far in the 1980s, and most experts predict there is more to come.

The U.S. Department of Commerce estimates that the total number of service stations dropped from a peak of 226,459 in 1972 down to 139,250 in 1983, a decline of 87,209. And, while some private industry sources peg the gross numbers at a higher level, the percentage fallout is comparable.

Refinery capacity continued growing until the 1980s but has dropped dramatically since then. Total operable capacity was 16.9-million b/d in 1983, down 1.7-million b/d from 1981, according to the American Petroleum Institute. API says the number of refineries dipped from 315 in 1981 down to 233 last year.

The National Oil Jobbers Council has estimated that between the end of 1980 and 1982, the "universe of independent petroleum marketing companies" decreased by "more than one-third." It put the "universe of jobbers" operating at the end of 1982 at 15,160 companies.

Private-brand independents also have felt the pinch from increased price competition and lower demand. Michael S. Kirschner, president of Kirschner Bros. Oil Co., Philadelphia, and '84 president of the Society of Independent Gasoline Marketers of America, believes the number of private-brand independents in business today is down a "minimum" 25-30% from four or five years ago.

There have been dramatic reductions in most major company marketing staffs, too, and a new trend toward "centralizing" staff operations again. This has caused the closing of many district and regional offices.

Most companies, too, currently are operating in fewer states than they were in during the 1970s.

OPEC Power

By the summer of 1973, oil marketers knew that something big was about to happen.

For a year, private-brand independents had been experiencing trouble in keeping their supply lines open. The excess supply that had always been available to them, often at cut-rate prices, had dried up.

Refiner-suppliers were putting their branded jobbers and dealers on allocation. Price protection was being pulled.

At a National Petroleum Refiners Assn. convention that year, a traditional breakfast meeting of supply and exchange people was crowded with private-branders, brokers and others searching for product.

"If a man stood up in here and shouted that he had 50,000 bbl. of gasoline to sell, he'd be trampled to death by people trying to get to him," observed a refiner in attendance.

By June, it was estimated that a gasoline supply shortage ranging from 300,000 to 400,000 b/d existed. The American Petroleum Institute issued a study projecting U.S. demand for oil would reach 31-million b/d by 1985. It said 17-million b/d would have to be imported to help meet this demand. At the time, imports were running 3.4-million b/d.

Tight supply was already the main topic of conversation at jobber meetings. "I've waited 30 years for a tight supply situation. When it comes, prices are frozen, and we can't enjoy it," said one jobber.

That summer was a time to get full profit-margins and clean up markets.

"Share of the market is out. Profitability is in," said a marketing vice president. "We're getting rid of all the evils that have crept into marketing since the U.S. Supreme Court broke up the Rockefeller monopoly," said another.

Almost nobody at the time, however, was talking about events taking place in the Middle East.

Over there, international oil companies were in the process of losing control of oil concessions they had held for nearly 50 years. The 12-year-old Mid-East oil cartel then decided to flex its muscle in a way that made the old Standard Oil trust schemes look feeble—it sprung its first "oil shock" on the free world.

On Oct. 17, 1973, the Organization of Arab Petroleum Exporting Countries (OAPEC) authorized an embargo of oil shipments to the United States and Holland in retaliation for their support of Israel in that year's Middle East war.

One day later, the Organization of Petroleum Exporting Countries (OPEC) enacted a 70% price increase—from $3.01 to $5.12 bbl.

On Oct. 20, the oil embargo started. By Christmas Eve, with motorists already waiting in line at service stations, OPEC boosted its price again, this time to $11.65 bbl.

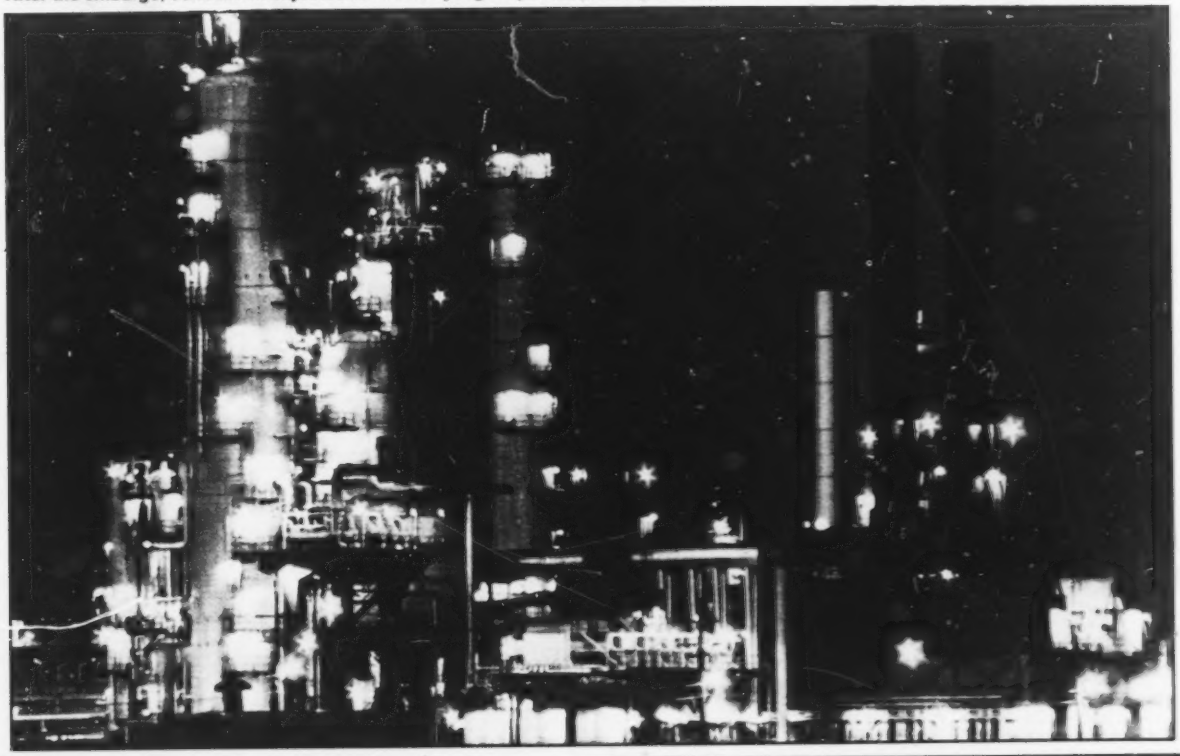
OPEC now had full control of world oil prices and had set in motion the biggest transfer of wealth in the world's history. Crude oil prices would soar as high as $40 bbl. by the late Seventies.

OPEC's pricing actions—at that time and later—struck the free world a stunning blow. Oil-consuming nations couldn't help but pay whatever price OPEC decided its oil was worth. Rampant inflation, high interest rates, recession and unemployment were to follow throughout the free world.

In the United States, immediate reaction was that the whole thing had been engineered together by OPEC and the big oil companies to " rip off the public" with high oil prices.

Congress began calling for hearings to investigate the industry's "obscene profits." Sen. Walter Mondale charged that the oil companies "have worked out special deals with the Arab sheiks to jack up their foreign tax credits." Sen. Abra-

After the embargo, consumers adjusted to markedly higher prices, pushing refinery runs to a 116.7-billion gal. peak for gasoline in 1978.



ham Ribicoff charged the industry with "cheating the U.S. public."

The First Big Shock

Ten years ago this month and with motorists across the country fuming in gasoline lines, the oil companies' fiscal 1973 profit reports came in, and a public outcry rang out.

Exxon reported its 1973 net profits were $2.44-billion, the highest ever made in a single year by an industrial company in the United States. Texaco reported its net earnings had hit $1.6-billion. Many other companies reported increases in the 50% range, and some exceeded 100%.

"I'd like to correct the impression that we have excess profits," Exxon Chairman J.K. Jamieson told a group of 80 reporters assembled in a teak-paneled, blue-upholstered conference room at its New York headquarters building. "That's absolutely not true."

Texaco explained in full-page newspaper advertisements that it had invested $1.6-billion in 1973 to "help fill your energy needs."

Mobil Oil, whose $84.2-million profits represented a 47% gain over 1972, explained in advertisements that it had just spent $271.1-million on a federal lease in the Gulf of Mexico.

To wit, companies were having lots of explaining to do.

Although OPEC began dictating what its crude prices would be, everybody else who owned crude oil became several times richer almost overnight as the prices began to soar. Domestic crude oil prices had been put under federal controls, but postings everywhere else were rising to what OPEC said the world price was.

While a few industry voices had warned that the nation was becoming too dependent on foreign oil, they had been largely ignored. By late 1973, with demand for petroleum products soaring, the nation was importing 35% of its roughly 6-million-b/d needs. About 1-million b/d of this was coming from Arab sources.

Then, suddenly the Arab members of OPEC called for the embargo. Imports from Arab sources dropped to 18,000 b/d, and OPEC oil prices skyrocketed to 10 times their level only two years previous.

Price controls had been put on the oil industry earlier by the Nixon administration in hopes of slowing inflation. Oil marketers suddenly found themselves with a market in short supply but no way to take full advantage of it, legally.

Roughly 25,000 service stations were closed by December, as the cars began lining up for gasoline. Others that remained open did so for only a few hours a day. Jobbers scrambled for supply, but this was difficult to come by.

By March 1974, just as the oil companies were beginning to report record profits, the supply shortage was beginning to ease. The long gasoline lines disappeared almost overnight, even while some oil company and government leaders were warning the shortage might last a year or two, even longer.

The industry had a big credibility problem, with the public confused and suspicious over what had happened. By March, the government had allowed dealers to pass through their higher product costs, and gasoline prices were 30% higher on the street. Then, the supply "shortage" ended.

Somehow, many consumers felt, OPEC and the major oil companies had contrived to create an artificial supply shortage and hike prices.

Excessive oil profits and later, $1 gal. fuel spawned angry protests.

The Second Shock

But motorists and homeowners soon became accustomed to the higher prices. They resumed consuming just as much oil as ever. *Much* more, in fact. By 1978, the nation was consuming a record 116.7-billion gal. of gasoline and 52.8-billion gal. of distillates.

Then, the Iranian revolution shut off part of the Middle East oil once more. By then, the nation was having to import 43.5% of its total domestic oil requirements. Prices went through the roof again.

Regular-grade gasoline that had retailed for a nationwide average price of 35.69¢ gal. in 1970 had soared to 63.07¢ by 1977. By 1979, it was up to 87.79¢ and by 1980, was $1.2172. The nationwide average hit $1.311 in 1981, but by then, American motorists had begun to slash their purchases.

Since 1981, gasoline consumption has continued to fall and so have prices. Average pump postings dropped about 9¢ below their 1981 peak in 1982.

Heating oil prices went through about the same pattern, topping out in 1981 at $1.2466 gal.

Jobber's World Changes

Before OPEC plunged the free world into its first big supply disruption, mar-

Distributors Before/After Oil Shocks . . .

	1972			1983		
Company	Jobbers	Agents	Total	Jobbers	Agents	Total
Amoco	617	3,176	3,793	1,961	2	1,963
Arco	1,103	NA	1,103	189	0	189
Cities	484	216	700	350	0	350
Conoco	935	601	1,536	830	0	830
D. Shamrock	131	2	133	150	1	151
Gulf	1,116	1,170	2,286	1,715	49	1,764
Exxon	NA	145	145	972	3	975
Marathon	89	0	89	79	0	79
Mobil	2,623	306	2,929	1,996	36	2,032
Phillips	1,699	303	2,002	1,693	2	1,695
Shell	1,130	77	1,207	612	0	612
Getty/Skelly	1,058	117	1,175	582	0	582
Socal/Chevron	139	551	690	777	87	864
Sun	NA	NA	NA	NA	NA	NA
Texaco	NA	NA	NA	1,176	6	1,182
Union	612	581	1,193	431	27	458

keters in the U.S. were moving lots of gasoline and distillates but at very little profit, especially for refiners.

Gasoline consumption in the U.S. soared some 15.2-billion gal. between 1970 and 1973. According to one estimate, 90% of the people were taking vacations by car, averaging 2,120 miles per vacation trip and consuming 150 gal. of gasoline.

Branded jobbers in 1971 and 1972 were paying about 13¢ to 14¢ gal. for gasoline, and the branded dealer tankwagon price hovered between 17¢ and 18¢. Both prices were too high to compete with private-brand independents, who could usually buy product at least 2¢ gal. below the branded jobber price.

Because the independents usually had greater operating efficiencies than their branded competition, they usually could undersell suggested major brand retail postings by 4¢ to 6¢ gal.

To protect their branded jobber and dealer networks, most major companies had competitive price protection plans. Typically, a company would absorb 75% of retail price drops down to a certain level, then guarantee the jobber and dealer a floor or "stopout" margin. These floors, on the average, were 2.5¢ for jobbers and 4.5¢ for dealers.

Most marketers today admit this system was abused. It helped to start and prolong price wars.

According to one *NPN* estimate suppliers paid out more than $1-billion in competitive price supports in 1970.

Smaller majors in the early 1970s began searching for a new way to price their gasoline to jobbers and dealers. "A new method must be found," said a Phillips marketing executive. His company had a 0.17% return on refining and marketing in 1971 and 1.92% in 1972.

"We could go across the street and do a lot better in a savings and loan bank," G. J. "Pete" Morrison, marketing vice president, said.

By late 1971, companies such as Conoco, Cities Service, Phillips, Amoco and Mobil were testing various types of "new" pricing plans. Conoco had started this trend with a "rack" pricing program in Texas' Rio Grande Valley.

Some of the large majors weren't as excited about these tests or convinced of their need as were the smaller ones. The big companies were concerned that the plans—basically involving the elimination of price supports—would cause them to lose jobbers and dealers.

But at one company where a new plan was being studied, a vice president brushed aside such concern for jobbers. "---- 'em," he said. Such executives felt the drain on profits had become too much to continue under the old DTW system.

Some of the initial attempts to convert to rack or terminal pricing collapsed when supply tightened and margins improved. Next came federal controls with the Arab oil embargo of 1973-74, and all the old pricing systems were frozen in place until the controls ended in early 1981.

Decontrol in 1981 ended price protection, as well as market restraints.

Bureaucrat's Heaven

The disruption of supply created a dream world for hordes of Washington bureaucrats. It was not hard to slap a voluminous, complex and often contradictory set of controls on the industry.

Washington's avowed purpose was to see that scarce supplies were shared equally and that the public wasn't gouged on prices. The intent was noble, but the overabundance of regulations that flowed from the bureaucrats often helped cause supply outages and higher prices.

Overall, they worked well for the less-aggressive marketer. He was "guaranteed" a certain amount of supply at the same discount of whatever the DTW price was that he had been given before controls.

Some jobbers didn't bother to update their marketing facilities or expand. In addition to the expense involved, there was always the red-tape of getting supplier and government approval for expansion. In some cases, a retail operator was even supposed to get approval from his competition before building a new station.

Often, many found, it was easier to just sell their allocated supply to other more aggressive marketers.

The aggressive marketer just worked his way around the red tape, however, and continued to expand and grow. At times when margins shot up to 10¢ or 15¢ gal., the non-aggressive ones did well, and the aggressive ones did very well. Some of the latter, in fact, became very rich.

But oil marketers had other problems from Washington to contend with during the Seventies. Many other government agencies were crawling around their businesses to ascertain if they were complying with environmental, employee safety, and various other regulations. Refiners had to start making unleaded gasoline, trucks and bulk plants had to be specially equipped to control fuel vapors, and the environmentalists pushed for expensive vapor control systems at service stations.

New Era Begins

When the federal controls governing price and supply were lifted in early 1981, the jobber's world started changing again. Indeed, it was a new ball game for all of refining and marketing.

Since decontrol, most refiners have gone to some variation of terminal pricing. The margin "guarantees" and competitive price protections of the past have been pretty much discarded for jobbers.

In addition, most companies have tightened up what were once liberal credit policies, many have abandoned the idea of "free" credit cards and most have instituted other changes in programs which once helped the jobber.

While reducing the jobber's traditional benefits, many companies have taken a tough stance in the retail market. This has caused considerable ill-feeling among both branded and unbranded jobbers toward the larger refiners, and has led to threats of attempts to obtain "legislative relief."

Both branded and unbranded jobber groups accuse the major companies of trying to drive them from the marketplace.

The majors counter that many of the things they once "gave" jobbers are obsolete in today's marketplace. They contend that their marketing departments are being called on to make greater profit contributions to help their companies finance the ever-increasing cost of finding more oil.

The jobbers, or at least most of them, say they can understand a major company's need for profits. But many question the street tactics of some.

Whether they prefer the old or the new world of marketing, the majority agree that conditions have changed. Indeed, oil marketing continues to change—maybe for better, maybe for worse . . . but certainly for all time. NPN 75th